

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-5 and 7-15 are pending in this application. Claims 1, 11, and 12 are amended and Claims 13-15 are added by the present amendment.

The Advisory Action maintains the rejections presented in the Final Office Action of July 31, 2008. The Final Office Action indicated that the title was objected to; Claims 1-5 were rejected under 35 U.S.C. §102(b) as anticipated by Huang (U.S. Patent No. 5,963,609, hereafter "Huang"); Claims 1-5, 7-8 and 12 were rejected under 35 U.S.C. §102(b) as anticipated by Goetz (U.S. Patent No. 5,233,615, hereafter "Goetz"); and Claims 9-11 were rejected under 35 U.S.C. §103(a) as unpatentable over Huang and further in view of Banman (U.S. Patent No. 5,557,751, hereafter "Banman").

Regarding the objection to the title, the title has been amended to be more descriptive as suggested by the Final Office Action. No new matter has been added. Accordingly, it is respectfully requested this objection be withdrawn.

The outstanding rejections on the merits of the claims are traversed for the following reasons.

Independent Claims 1, 11, and 12 have been amended to more clearly recite that a predetermined range, when one of the processor elements transmits control command signals, is a subset smaller than a set of n possible values of a modulo-n cycle counter. The claim amendments find support, for example, in Figure 2 and its corresponding description in the specification. Figure 2 shows that one processor

element sends control command signals during a window W that corresponds to the predetermined range, which is a subset smaller than the n set of values of the modulo- n cycle counter, i.e., 0 to $n-1$. No new matter has been added.

Briefly recapitulating, amended Claim 1 is directed to a processor array that includes an array of processor elements. Among other things, Claim 1 recites that one of the processor elements is configured to transmit control command signals only when a cycle counter takes a value which is within a predetermined range. The predetermined range is a subset smaller than a set of end possible values of the modulo- n cycle counter. Claims 11 and 12, although different from independent Claim 1, have been amended similar to Claim 1.

In a non-limiting example, Figure 1 shows the plurality of processor elements 10, 12, 14, and 16, the one of the processor elements 10, the modulo- n cycle counter 30, and Figure 2 shows how the processor element 10 transmits control command signals only when the cycle counter takes a value which is within the predetermined range W , which is a subset smaller than a set of the n possible values 0 to $n-1$ shown on Figure 2.

Also, it is noted that independent Claims 1, 11, and 12 have been amended based on the suggestion of the Examiner noted in the second full paragraph, on page 2, of the Advisory Action.

Rejection of claims over Huang is traversed

Huang has been discussed in the previously filed Amendment, and the Final Office Action indicated that Huang discloses at column 6, lines 15-21 that a master control unit 31 issues transfer control signal and synchronization clock signals to the slave control unit 35 and slave control unit 39, which indicates that data transmission can be carried among chips 30, 34, and 38.

However, Huang does not teach or suggest that the master unit is configured to transmit control command signals only when its cycle counter takes a value which is in a predetermined range, which is a subset smaller than a set of n possible values of the modulo-n cycle counter, as recited by independent Claims 1, 11, and 12.

Accordingly, it is respectfully submitted that independent Claims 1, 11, and 12, and each of the claims depending therefrom, patentably distinguish over Huang.

Rejection of claims over Goetz is traversed

As noted in the previously filed Amendment, Goetz does not teach a processor array in which one processor is able to transmit command control signals to each of the other processors. Goetz teaches that instead of using a single processor to perform a task, a multiplicity N of processors may be used to achieve fault tolerant operation. The N identical processors are programmed to each execute identical programs in response to a common set of input signals. As shown in Figure 1, each processor A, B, and C is arranged to receive system inputs and pass their outputs to a majority voter, see for example, the description at column 3,

lines 7-22. Therefore, each processor in Goetz is arranged to be independent of the other processors and to run an identical program for fault tolerance, which is contrary to the independent claims.

Further, Goetz does not teach or suggest that one processor element transmits control command signals only when the cycle counter takes a value which is within a predetermined range, which is a subset smaller than a set of n possible values of the modulo-n cycle counter as recited by amended Claims 1, 11, and 12. On the contrary, Goetz teaches away from such an arrangement as no masters or slaves are established in the system.

Accordingly, it is respectfully submitted that independent Claims 1, 11, and 12, and each of the claims depending therefrom, patentably distinguish over Goetz.

Rejection of claims over Huang and Banman is traversed

Independent Claim 11 has been amended similar to Claim 1, which as discussed above, distinguishes over Huang. The Final Office Action states on page 8, first full paragraph, that Huang "does not explicitly disclose storing transferred data in registers corresponding to the predetermined sequence of code words such that each received word is stored in its respective register for the duration of said predetermined sequence of code words." In order to cure only this deficiency in Huang, the Final Office Action relies on Banman.

However, Banman does not cure the other deficiencies of Huang discussed above with regard to independent Claim 1. Accordingly, it is respectfully submitted

that independent Claim 11 patentably distinguishes over Huang and Banman, either alone or in combination, as Claim 11 recites the novel features of Claim 1.

New Claims 13-15 have been added to set forth the invention in a varying scope and Applicants submit the new claims are supported by the originally filed specification. In addition, dependent Claims 13-15 have been drafted as suggested by the Advisory Action, on page 2, third full paragraph. No new matter has been added. Accordingly, it is respectfully submitted that Claims 13-15, which depend from independent Claims 1, 11, and 12, patentably distinguish over the applied art for the reasons noted above with regard to the independent claims.

Subsequently, in light of the above discussion and in view of the present amendments, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested. Should the Examiner have any questions relating to expediting the prosecution of this application, he is urged to contact the undersigned at the number provided below.

Respectfully submitted,

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